The knowledge, Attitude and Perception of HIV Voluntary Counseling and Testing (VCT) among Young Adults in Kempton Park Community, North of Ekurhuleni Municipality, Gauteng Province: Improving the uptake of VCT.

By

Student: Dr E.D. Otasowie

Supervisor: Prof Pierre De Villiers

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DECLARATION

I, Dr Emwinghare Donald Otasowie hereby declare that this research study is my own original work and was undertaken by myself.

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Signature of Principal investigator

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Date

The work presented in this dissertation was undertaken in the Faculty of Health Science, University of Stellenbosch, and Cape Town.

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Special thanks go to Edith Makgai and Thamie Yeza for their assistance in the translation of the consent forms into the two main local languages. I also wish to thank the Research and Ethics committee of Ekurhuleni District for giving me the permission to conduct this study in the district.

Finally I will like to thank God the almighty for the courage and strength to see this research study to its completion.

DEDICATION

This research study is dedicated to my son, Nosakhae Tsebo Donald (Jr), whose timely arrival not only brought me unquantifiable joy but more especially immense inspiration to see this study to its completion.

ABSTRACT

Introduction: In recent times, HIV Voluntary Counselling and Testing (VTC) have come to be widely regarded as an important method of HIV prevention and support service. Therefore, it is not surprising that VTC has become the current area of focus for the control and prevention of the spread of HIV/AIDS in this part of Southern Africa. The uptake of HIV VCT in South Africa, as well as globally, is very low mainly because of society's low knowledge of the HIV/AIDS disease, negative societal attitudes towards those infected with HIV and significant social stigma associated with HIV/AIDS infection.

Aim: The aim of this study is to access the knowledge, attitude and perceptions towards HIV infection and VCT among young adults in Kempton Park community with a view of finding appropriate solutions to the identified problems.

Objectives: The objectives of this study are to identify the socio-demographic profile of the study population, access their influence on the knowledge and attitude towards HIV infection and VCT and to access the extent of HIV VCT uptake and the effect of VCT on change in risk behaviour, knowledge about HIV infection/AIDS and related stigma.

Materials and Methods: A quantitative study design by way of a descriptive cross-sectional survey was carried out in Kempton Park community which has an estimated population of about between 400,000 – 800,000 inhabitants. The study was conducted in three local clinics within the community which offered free primary health care services to all the community members. The study population was made up of young adults between the age brackets of 18-45 years who

could be regarded as the most sexually active population group. A structured questionnaire was used as a data collecting tool from 4th January to 12th February, 2010. The questionnaire was administered to a total number of 321 participants comprising 217 (67.6%) females and 98 (30.5%) males. The participants were randomly selected without gender or racial discrimination.

Results: The findings showed that there was a high level of uptake of VCT in the community sampled with a test history of 63.9% (i.e. those who have previously taken HIV VCT) as well as a high level of HIV/AIDS knowledge, supportive community attitudes towards HIV infected persons and less HIV related stigma among the respondents. The results also showed a direct correlation between these good outcomes and previous exposure or participation in VCT. There was no significant variable shown to determine the uptake of VCT services. The risk of HIV transmission was found to be higher with males. They were more likely to have more sexual partners and to have previously contracted sexually transmitted infections than females.

Discussion and Conclusion: There is an obvious step in the right direction to improve society's attitude towards the uptake of HIV VCT as can be inferred from the results of the study. However, more work needs to be done by Government and NGOs with co-operation from community and youth leaders at the grass root level to ensure that the correct information and education on HIV/AIDS gets to every individual in every community in the country. Adoption of a more positive attitude towards HIV infected people and reduction in the associated stigma will encourage more young adults to know their HIV status by taking VCT. This will help to control the spread of the deadly HIV/AIDS disease in the long run.

CONTENTS

TABLES AND FIGURES

ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune-Deficiency Syndrome
ARTs	Anti-Retroviral Therapy
ELISA	Enzyme Linked Immuno- Assay
HAART	Highly Active Anti-Retroviral Therapy
HCT	HIV counseling and Testing
HIV	Human Immune deficiency Virus
NGOs	Non - Governmental Organizations
STIs	Sexually Transmitted Diseases
UNAIDS	Joint United Nations Programme on HIVand AIDS
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

NOMENCLATURE

Non-respondents	These are participants who responded to questions from the questionnaire but did respond to or answer certain questions in the
Testing History	The number of times HIV test had previously been done
Uptake	The acceptance

Chapter 1- Introduction

The Human Immunodeficiency Virus (HIV) and Acquired Immuno-Deficiency Syndrome (AIDS) is a serious health problem with enormous socio - economic implications for any nation and the world in general. Much of the global burden of the AIDS disease is borne by sub-Saharan Africa of which South Africa has a significant proportion[1].

It is estimated that about 38 million people are infected worldwide with HIV, with over 90% of the infected population living in developing countries. Sub-Saharan Africa alone has 64% of the infected population. Of the total population infected with the HIV virus, only 10% know their status (UNAIDS 2006)[1] .The UNAIDS also puts AIDS and HIV related deaths at about 3 million most of whom are young adults. The 2008 report on the Global AIDS epidemics by UNAIDS reported that South Africa has an estimated 5.7 million adults and children living with HIV, and an estimated 350000 AIDS –related deaths in 2007[2].

In line with international practice, the South African Government has adopted three strategies to control the spread and progression of HIV as follows:

1. Prevention through health education e.g. safe sex practices by promoting the use of condoms

2. Information and education about care and support services

3. Voluntary Counselling and Testing (VCT)

Until recently, VCT has received the least attention by the Government mainly due to logistic reasons (resulting from inadequate Anti Retroviral therapy infrastructure and inability of some tested clients to receive their test results). Other reasons identified are psychosocial in nature

(which include poor use of VCT due to fear of the associated social stigma attached with confirmed positive status as well as rejection by the society).[3] Studies have shown a positive relationship between the uptake of VCT and the low rates of the spreading of HIV which makes it imperative to shed more light on this relationship and possibly adopt the strategy as a baseline in the national preventive programme.[1,3]

The HIV/AIDS pandemic is fuelled by HIV positive people who are not aware of their status and who continue to indulge in high risk behaviour[4]. The specific age range which is considered to be in the main risk bracket in South Africa for the spread of HIV is that of young adults (ages 18 to 45). The HIV prevalence within this group is high, while their perception of risk is quite low.[4]

I have been fortunate to be working in the local clinics as part of the District Health Care programme. The number of young adults who have come in and are treated for Sexually Transmitted Infections (STIs) is of great concern. This large numbers seen suggest that preventive measures such as education about safe sexual practices are either not understood or are not taken seriously. Most of these patients do not know their HIV status and are not willing to take the HIV test. The main reason why they do not know their HIV status is a high self assessment of being HIV infected based on persistent self indulgence in risk behaviour (unprotected sexual intercourse).

This unfortunate trend provides a favourable platform for the easy spread of HIV and defeats ongoing preventive efforts. Strong evidence from previous studies have shown that HIV VCT positively influences the subsequent risk behaviours (like unprotected sexual intercourse, drug abuse, etc) of those tested[4]. Therefore, there is a need to encourage acceptance of HIV VCT among young adults who constitute the bulk of the population at risk[4].

Heterosexual intercourse still remains the major means of transmission of HIV infection[6]. So it seems reasonable to perform this study on the most sexually active population group namely, the young adults. The large number of infected individuals who are not aware of their status greatly facilitates the spread of HIV infection thus defeating all efforts to control the disease. Testing is vital for reducing the prevalence of HIV/AIDS in South Africa because knowing one's status enables one to seek the support one needs to feel empowered when making informed decisions concerning individual livelihoods, sexuality and family planning[5]. This fact is further echoed by UNAIDS in the 2001 assertion that VCT functions as a gateway to prevention and support services[3]. In this regard, it should be an imperative for every individual to know their status, especially the most sexually active and productive population group.

My research was an attempt to get an overview of young adults' attitude to and understand and perception of HIV testing (VCT) in the Kempton Park community. Results from this study will provide more insight into ways of improving HIV testing among young adults in this region. I strongly believe that the design of any intervention to promote the uptake of VCT will require close understanding of the knowledge and socio-cultural factors regarding HIV infection and the identification of potential barriers to testing. It is important that HIV prevention programmes are locally adapted to the relevant epidemiological, economic, social, and cultural contexts in which they are implemented.

Although, there have been quite a few similar studies previously done on the same topic, I believe this topic still deserves further research due to its sensitive nature and the integral role of VCT in HIV preventive programmes. Personal experiences from my community of practice showing an alarming number of young people who visit the local clinics daily with sexually transmitted infections (STIs) have been the source of motivation for undertaking this study.

Chapter 2 - LITRATURE OVERVIEW

Numerous researches have shown that although the knowledge and awareness of HIV and VCT is high among most African communities especially in sub-Saharan Africa, the uptake of HIV VCT is poor [1,2,3,4]. Recent studies estimate that less than half of the general population has been tested for the HIV infection[3]. Kalichman S.C. et al[7] in their 2003 study in South Africa revealed that only 44% of participants had previously tested while 53% had not been tested and 3% refused to respond to the questionnaire. Interestingly there was significant increase in the level of willingness to get tested after the first testing. These figures correspond with but are slightly lower than reports from similar studies conducted in 2005 in Botwana[8], Zambia[9] and Uganda[10] where the reported history of those tested in the last 1 year was 55%. Zubairu I. et al[11] in a study conducted in Kano, Nigeria, in 200 6reported that almost 99% of participants had not been tested.

There are various reasons for taking the HIV test ranging from enabling early commencement of treatment; protecting others from contracting the disease (Zubairu I) [11] to self assessment of a high rate of risky behaviour (Kalichman S.C.)[7]. A study conducted by Judy E. Mill et al[12] among Canadian Aboriginal youths reported that the most common reasons for taking the test were having sex without a condom and pregnancy. The type of healthcare facility offering testing, educational level and stage of pregnancy were reported by Bakari JP et al (2006) in their study conducted in Antenatal Care clinics in Zambian as factors responsible for willingness to get tested[9].

Adewale D.A et al[13] in their study discovered that those who volunteer for HIV Voluntary Counselling and Testing had higher knowledge scores for HIV/AIDS than people who refuse to take the test. This has some similarity with the study conducted by Hutchinson P.L. et al[14] about the utilization of voluntary counselling and testing services in the Eastern Cape, South Africa. Here the utilization of VCT services is positively associated with age, education, socioeconomic status, and proximity to clinics, availability of rapid testing and outreach services and lower levels of HIV/AIDS stigma.

Quite a few reasons were identified in the studies conducted in Nigeria[11], Zambia[9] and South Africa[7] for the negative attitude of individuals to HIV VCT. These included individuals' low perception of the risk of transmission, fear of social stigma associated with positive status[15,16], inadequate access to ART[17,16] and the incurable nature of the disease.

In 2004 a study was conducted by MacPhail CL et al[18] in two South African townships to establish the perceptions of and needs for VCT among young people. The results not only showed limited VCT experience but also that the adolescents were afraid of knowing their status and felt that only symptomatic individuals should be tested. This is consistent with findings from a similar study by Mbunda G[19] in 2006 where it was reported that although there was a high level of knowledge of the availability of VCT services among participants, the services were poorly utilized unless the patients had signs and symptoms suggesting possible HIV infection. Social stigma and discrimination were also identified as some of the reasons responsible for this negative attitude. Van Dyk A.C and Van Dyk P.J[20] in their study on the service-related barriers to VCT in South Africa identified fear of breach of confidentiality and logistical problems (inadequate counselors, long lines and lack of privacy) as barriers to testing. Other problems were fear of rejection and lack of follow up support after diagnosis.

In an exploratory study conducted in Kenya and Uganda among young people on HIV voluntary counseling and testing by Horizons Programme, participants reported a high level of willingness to be tested but cited lack of confidentiality, high cost[21] and dishonest reporting of results as barriers.[19]

Adequate knowledge of HIV and VCT positively influences attitudes to and perception towards the disease, including transmission risk and social stigma. This was shown by Kalichman S.C. et al[7] in their study where repeated comparisons between a tested group and the group not tested on the of knowledge of HIV prevention, attitude towards VCT and AIDS associated stigma were made. In this study there were no significant group differences on any of the individual knowledge items but there were significantly more negative attitudes to VCT on the part of the group not tested. Participants from the group not tested were less likely to view beneficial outcomes from testing. This group was more likely to perceive adverse testing outcomes and more likely to endorse test avoidance. Results also showed the group not tested to hold significant greater AIDS related stigma than the group tested.

The results from the studies conducted in Zambia[9] and Nigeria[11] as well as a Canadian study on Aboriginal youths by Judy E. Mill et al[12] reported that the knowledge of the mode and risk of transmission of HIV varied considerably among participants. There was a general knowledge that unprotected sexual intercourse was the major mode of contracting the infection. However, the knowledge of vertical transmission from mother to child was more or less low among the participants.

Individual perception of behavioural risk of contracting the disease varies significantly and invariably influences the motivation to get tested as highlighted above. The survey conducted in Zambia by Bakari J.P et al, 2006[9] reported very low individual perception of the risk of

contracting HIV infection in individuals who had not been tested and that women were more likely than men to misjudge their risk. These perceptions however increased significantly after counselling. This corresponds in some ways with the report by F.M. Bwambale, 2005[10], who conducted a similar study on males in rural Western Uganda which showed that in spite of the risky sexual behaviour, perception for HIV risk, especially among older men, was very low. Judy E.Mill et al[12] also reported that the most common reasons provided for not getting tested were a self perception of low risk for HIV (43.5%) and not having had sex with an infected person (34.5%). Contrastingly, Anna Cockcroft et al[8] in a household survey in Botswana found that nearly half of the respondents thought they were at risk (47%).

Predictors of HIV VCT knowledge, and attitudes identified by most of the studies tend to include educational status, gender and age. Zubairu I et al[9] observed in their study that formal education and female gender are significant predictors of adequate knowledge about HIV/AIDS. Similarly, significant predictors of positive attitudes were formal education, knowledge of HIV/AIDS and female gender while age was found not to be significant. The studies by J.P.Bakari et al[9] and Sherr L. et al[21] had similar results except that the male gender acted as a positive predictor of the knowledge of behavioural risk. Adewale DA et [13] in 2004 reported in their study on the characteristics of volunteers and non-volunteers for VCT among unmarried male undergraduates in Nigerian Universities reported a significant advanced age relationship for the willingness to receive HIV test. The volunteers for HIV testing were found to be significantly older than non-volunteers.

There is evidence that VCT programs can affect sexual attitudes and behaviour and use of care and support services. Among young people who had taken an HIV test, most said they would adopt safer behaviours, such as abstaining from sexual intercourse, practicing monogamy, using condoms, or reducing the number of sexual partners[22]. Matovu KB et al [23] in a similar study in Uganda found that there was no reduction in risk behaviours observed after VCT have been

taken. There was however a different report by Sherr L et al (2007) in their prospective study which showed that the majority of the individuals who tested negative adopted more risky behaviour eg having more new sexual partners than in the previous year and having more frequent beer hall attendance.[21]

AIM

The aim of this study is to access the knowledge, attitude and perception towards HIV Voluntary Counseling and Testing (VCT) among young adults in Kempton Park Community with a view of finding appropriate solutions to identified problems.

OBJECTIVES

1. To access the socio-demographic characteristics of the study population

2. To access the knowledge of HIV infection and risk behaviour

3. To access the extent of the uptake of HIV VCT, previous testing history and attitude towards VCT.

4. To identify the socio-cultural factors (social stigma) associated with a positive HIV status

5. To access the influence of the socio-demographic characteristics on the knowledge and attitude towards HIV infection

6. To access the influence of HIV voluntary counseling and testing on the knowledge, HIV risk behaviour, attitude and perception towards HIV infection and VCT.

Chapter 3 - STUDY DESIGN AND METHODOLOGY

A quantitative study design by way of a descriptive cross sectional survey was conducted in three local clinics in Kempton Park Township, in the north of Ekurhuleni Municipality, Gauteng Province, from the 4 th of January to the 12 th of February, 2010. The choice of the study design was motivated by the rich knowledge about HIV testing among young adults in South Africa which was acquired in previous studies.

THE STUDY POPULATION AND SAMPLING

Kempton Park is a relatively small city with a mixed racial population estimated to be between 400000 and 800000 people. Due to the close proximity of the town to OR Tambo International Airport, there are a lot of industries in the area. There is a high level of unemployment in the community. The majority of the working population are casual workers earning middle and low income salaries in these industries.

In view of the high level of unemployment in the community and the fact that most of the working population are casual workers, it is understandable that there is very limited medical insurance coverage among the general population. They are largely dependent on the public health care services predominantly the Primary Health Care Services. The local clinics in the community are thus patronized mainly by those who are unemployed, pensioners, low income earners and students. Apart from preventive, health promotion and referral services, offered in this clinics, some of the unemployed patients also go there for disability grant assessment and other social grants recommendation.

The study population includes young adults between the ages of 18 to 45 years with no gender or racial exclusion. The sample size (n) was calculated by:

$n = p\ (1\text{-}p)/S.E^2$

Where p = proportion of the population with the characteristic being measured

S.E =Standard Error

Assuming p which is the testing history among the population is 45% from previous similar study.

Using confidence level of 95% and level of precision of 6% and

Knowing that 95% of the sample will fall within 1.69 standard errors of the mean.

Thus, SE is calculated as 6/1.96 = 3.03

Substituting into the formula gives:

n = 45(100 - 45)/3.03 x 3.03 =318

So at 6% level of precision a sample size of 318 was selected.

There were three additional volunteers which brought the final sample size to 321.

INCLUSION CRITERIA: There was no gender or racial restriction in sample selection. Those who have previously been tested for HIV and people who have not been tested had equal chance of selection.

EXCLUSION CRITERION: Only young adults within the age bracket of 18 to 45 years were be eligible for selection while those outside this age bracket were not considered.

DATA COLLECTION

A well structured questionnaire with closed ended questions based on information from an extensive review of past published articles on similar studies was developed as a data collection instrument. The informed consent form which was translated in both Setswana and Afrikaans languages was used to obtain consent from participants before commencing the study.

PILOT STUDY

The questionnaires were pretested on a small population sample which has similar characteristics to the one that participated in the main study in one of the clinics prior to the commencement of the research. The result from this pretest was used to make some modification to the questionnaire.

PROCEDURE OF DATA COLLECTION

Participants who fall within the age bracket of 18 to 45 years were randomly selected using a statistical table of random numbers from the daily age-distribution register in each clinic at the reception. The selection followed a sequence of every 3rd, 47th, 43rd, 73rd, .etc patient on the register. The selected individuals were then approached by the research assistant who was a nurse working in the clinic to inform them of the purpose of the research and solicit their willingness to participate. Confirmation to take part in the study was by reading through and signing the written consent form in the language best understood by each prospective participants. Participants who could not read where assisted by the research assistance to read through the consent forms.

This was followed by the actual completion of the self administered questionnaire by each participant while they were waiting at the reception hall for consultation. There after the completed questionnaire were returned to the research assistant. The questionnaires were coded with numbers from 001 to 321 so as to help with collection. On average 10 questionnaires were distributed daily in each clinic within a time duration of 10 to 14 days. In total one hundred and twenty-one questionnaires were distributed, completed and returned back in Civic centre clinic, one hundred in Spartan Clinic and Birchleigh North respectively depending on each clinic's head count.

More than 95% of people who were approached agreed to participate in the study. There was no financial or other material incentive given to participants, they were simply content to be part of the study.

STATISTICAL METHODS FOR DATA ANALYSIS

The first part of the questionnaire was assessing the socio- demographic characteristics of the sample population. The total number for each variable was then expressed in percentages of the sample size. Cross-tabulation was calculated to test the significance of the associations between categorical groups and other important association (C.I and P- value). The threshold for statistical significance was considered as p value < .05 for all statistical analyses.

Chapter 4 - DATA ANALYSIS AND INTERPRETATION OF RESULTS

This chapter involves the analysis of data collected based on the responses to the contents of the questionnaire by the 321 participants.

The research instrument

Data was collected by means of a self administered questionnaire which was designed by the researcher. The questionnaire was divided into five sections:

Section 1: Biographic and general information

Demographic information was requested in order to compile a profile of participants in three local clinics in Kempton Park Township and provide information which might have a bearing on the findings of the study.

This section consists of seven variables: gender, age, race, marital status, occupation, level of educational, and religion. Each of these variables was analysed independently and then paired up to assess their impact on knowledge, attitude and perception of HIV voluntary counselling and testing (VCT).

Section 2 covered a range of questions in an attempt to access the knowledge about HIV Voluntary Counseling and Testing (VCT) among young adults in Kempton Park Community. These questions included:

- Can a person get Aids by sharing bathroom and toilet with infected person?
- Can washing after having sex without condom prevent HIV infection?

- Is AIDS caused by evil spirits or supernatural forces?
- Can a pregnant woman give HIV to her unborn child?
- Is there a permanent cure for HIV?
- Can HIV infection be spread by kissing?
- Do you think regular use of condoms help prevent HIV infection?
- How do you know if somebody has HIV infection?

Section 3 provides an explanation on risk behaviour as questions on the information concerning the exposure to HIV risk behaviour such as how many sexual partners have you had in the last two years?, how regularly do you use condoms? Have you ever been treated for any sexually transmitted infection? And have you ever used the same needle with other people?

This analysis was to identify the level of the risk behaviour among young adults in Kempton Park Community. Respondents chose one of the options like: one, or more than two. Yes and no according to the aspect of the question.

Section 4 assessed the level of acceptance of HIV testing among respondents and their attitude towards testing (VCT). This information was elicited by the following questions:

- Have you ever had a HIV test (VCT)?
- If yes was it in the last year?
- Did you receive the result?
- What was the result of the test?
- How many times have you been tested?
- Why did you go for the test (VCT) again?
- Would you want to take HIV test (VCT) again?
- Would you recommend HIV testing (VCT) to family and friends?

- Do you think family and friends will avoid you if you tested HIV positive?

The analysis was used to assess the extent of the uptake of VCT and testing history. It also assesses the relationship between the level of uptake of VCT and attitudes towards VCT. The respondents had to choose one option like: yes and no to show how they felt on each of the question posed.

Section 5 assessed the respondents' opinion about HIV/AIDS associated stigma. Questions such as:

- Do you think people with HIV are dirty?
- Do you think that people with HIV are cursed?
- Do you think people with AIDS should be avoided?
- Do you think people with AIDS are weak?
- Would you eat food prepared by a person with AIDS?
- Do you think people with AIDS should be isolated?
- Do you want to be friends with someone who is HIV positive?

The analysis was used to assess the level of acceptance and behaviour towards people infected with HIV and it also identified the socio-cultural factors (socio stigma, sexual history) associated with a positive HIV status. The respondents had to choose one option like: yes and no to show how they felt on each of the question posed.

Section 6 analysed the influence of HIV VCT on the knowledge, risk behaviour, attitude and perception of respondents towards HIV infection and testing.

Method of Analysis

In the data analysis that follows descriptive statistical techniques such as frequency analysis, pie charts, graphical bar charts and some parametrical statistical analysis such as:

- Contingency table
- Chi-square test
- Logistic regression were also used to test the association between categorical groups and other important association (OR, C.I and P-value).

were used as logistic regression.

RESULT

PARTICIPANT CHARACTERISTICS

Table 1: Age distribution

Age	Frequency	Percent
None respondent	8	2.5
18 – 21	33	10.3
22 – 32	145	45.2

33 – 42	111	34.6
43- 45	24	7.5
Total	321	100.0

The table above shows the frequency distribution of the age group of the participants in the study. There was a total of 321 respondents with age range of 18 – 45 years, a mean age of 30.12 and S.D = 8.7. The majority 145(45.2%) of respondents fall within the age group of 22 – 32 years of age closely followed by 111(34.6%) who were between 32 – 42 years old.

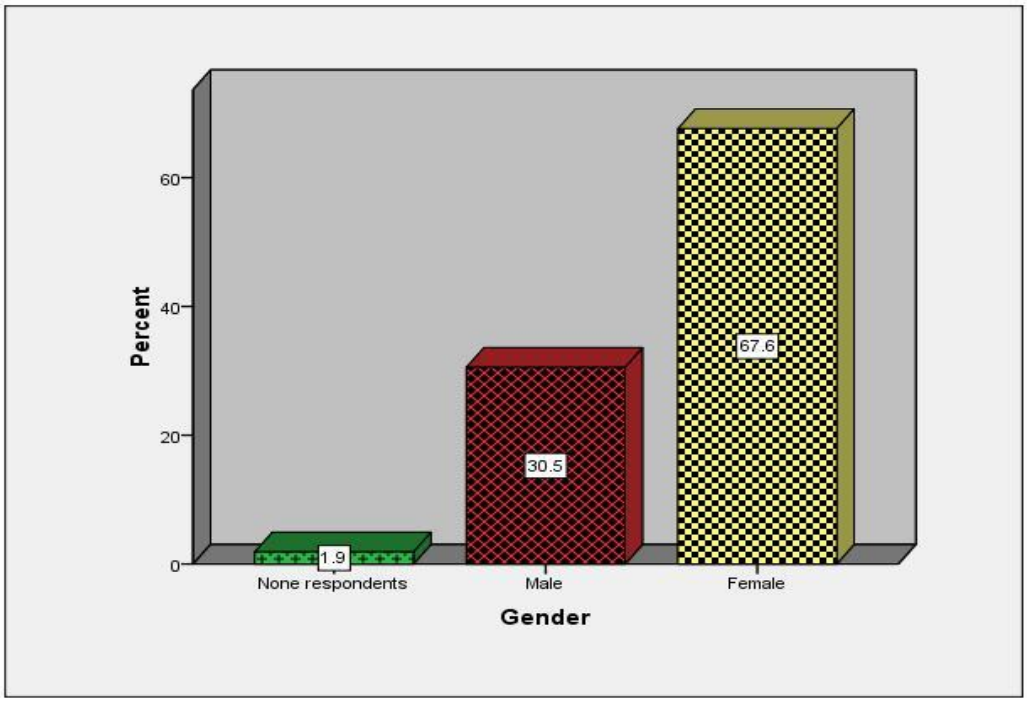

Figure 1: Gender distribution

The bar chart represents the gender composition of the participants with female 217 (67.6%) being higher with compared to male 98(30.5%).

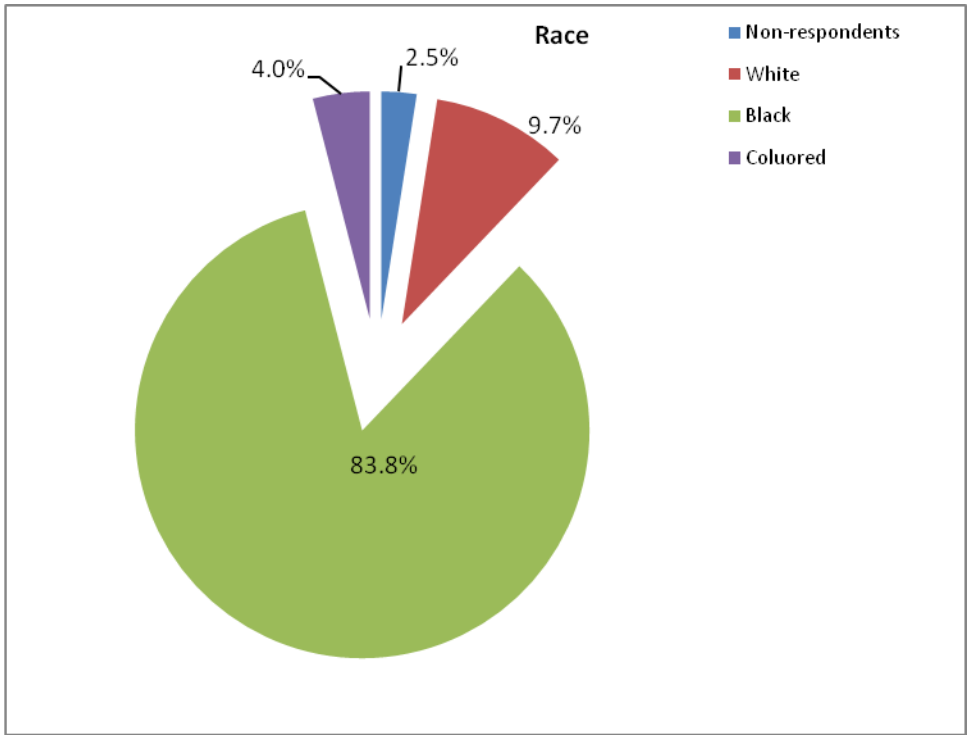

Figure 2: Race distribution

The pie chart highlights the race distribution of the participants blacks making up the majority with 83.8% followed by white with 9.7% and colored being the least with 4.0%.

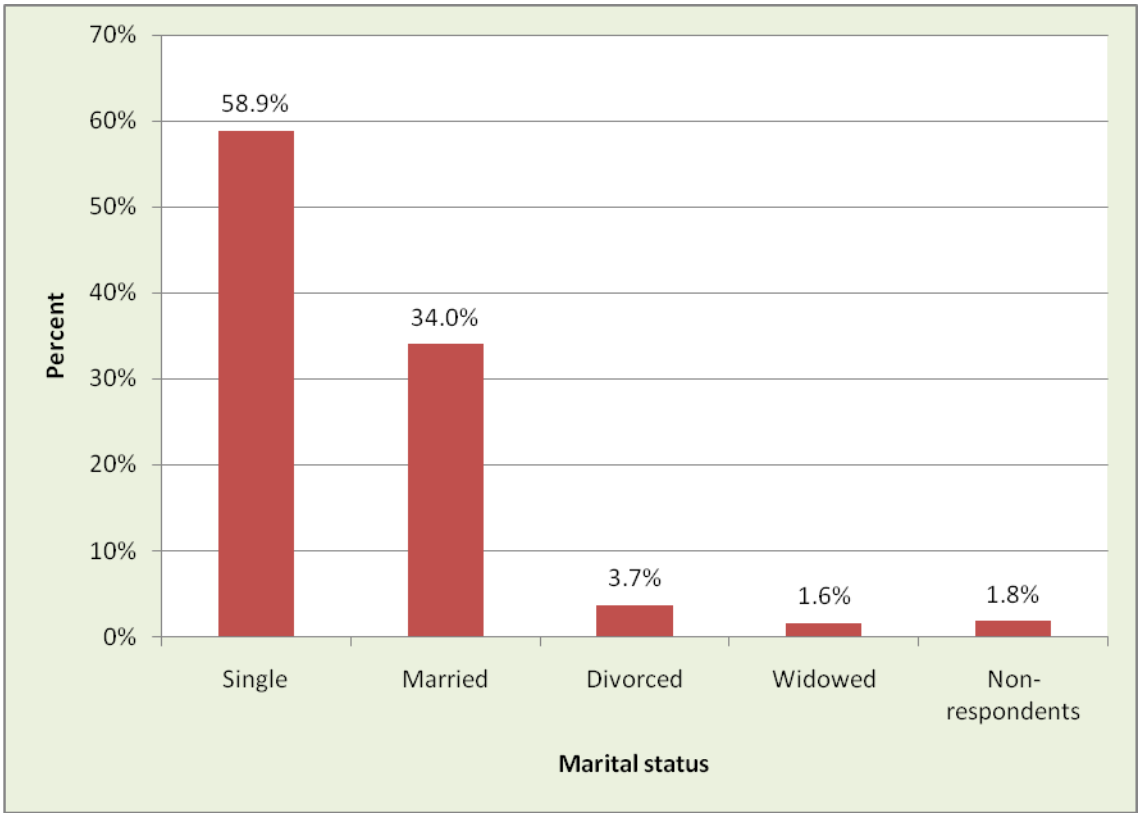

Figure 3: Marital status distribution

The marital status distribution as represented by the bar chart shows that most (58.88%) respondents were single, 33.96% were married, 3.74% were divorced while 1.56% were widow.

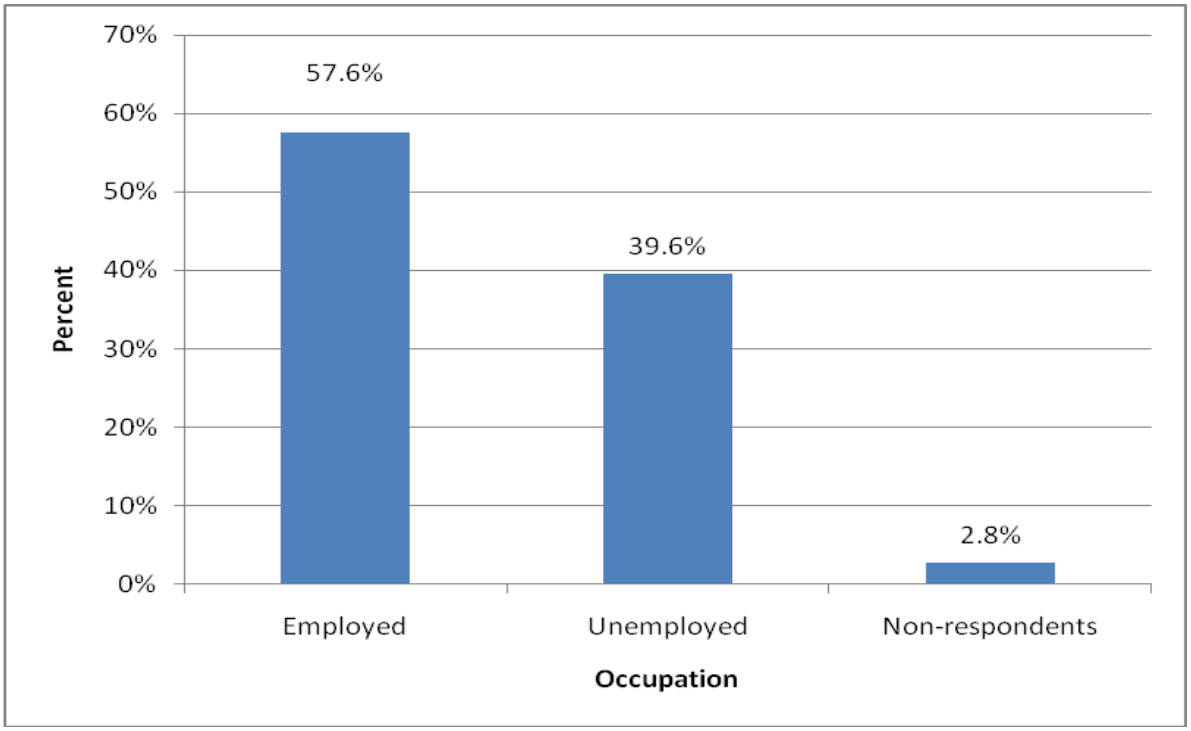

Figure 4: Occupation distribution

Fig-4 represents the occupation distribution; a large number of respondents 57.6% are employed while 39.56% are unemployed.

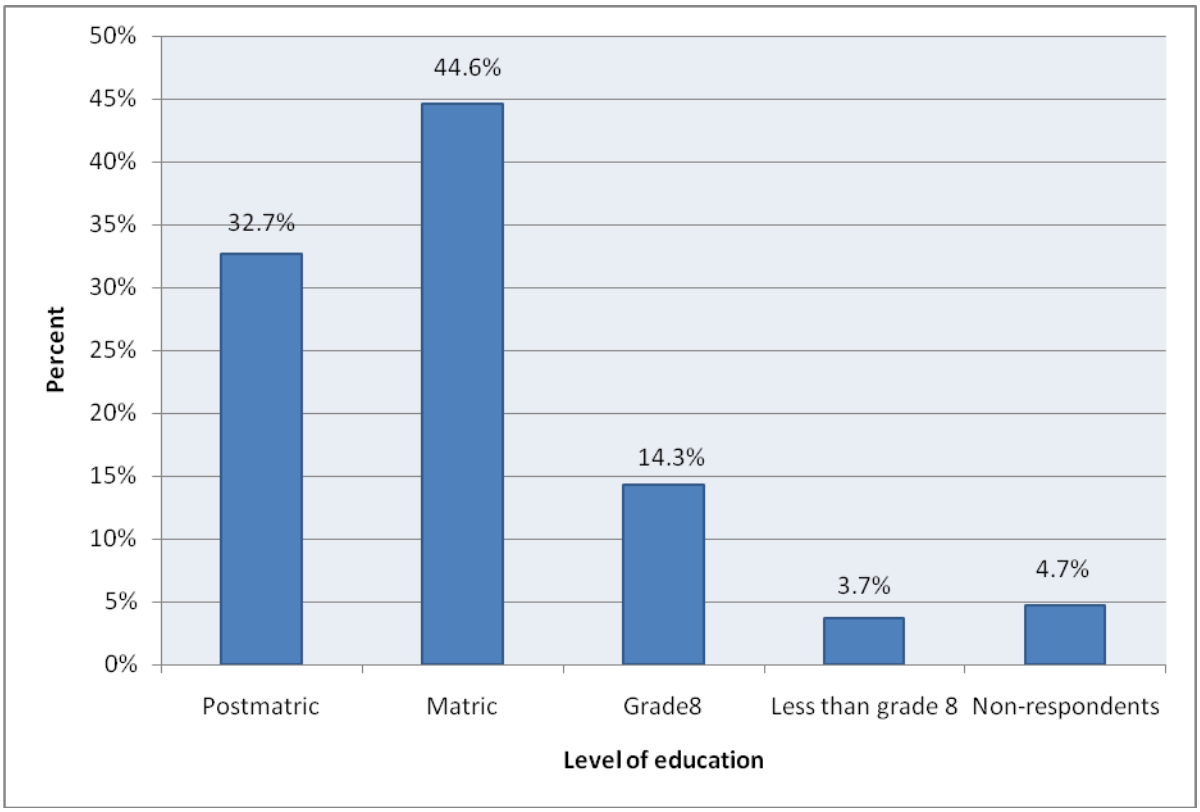

Figure 5: Level of education distribution

The bar chart shows that the majority of respondents (44.55%) attained matric level of education closely followed by post-matric (32.71%) and 3.74% having less than grade 8.

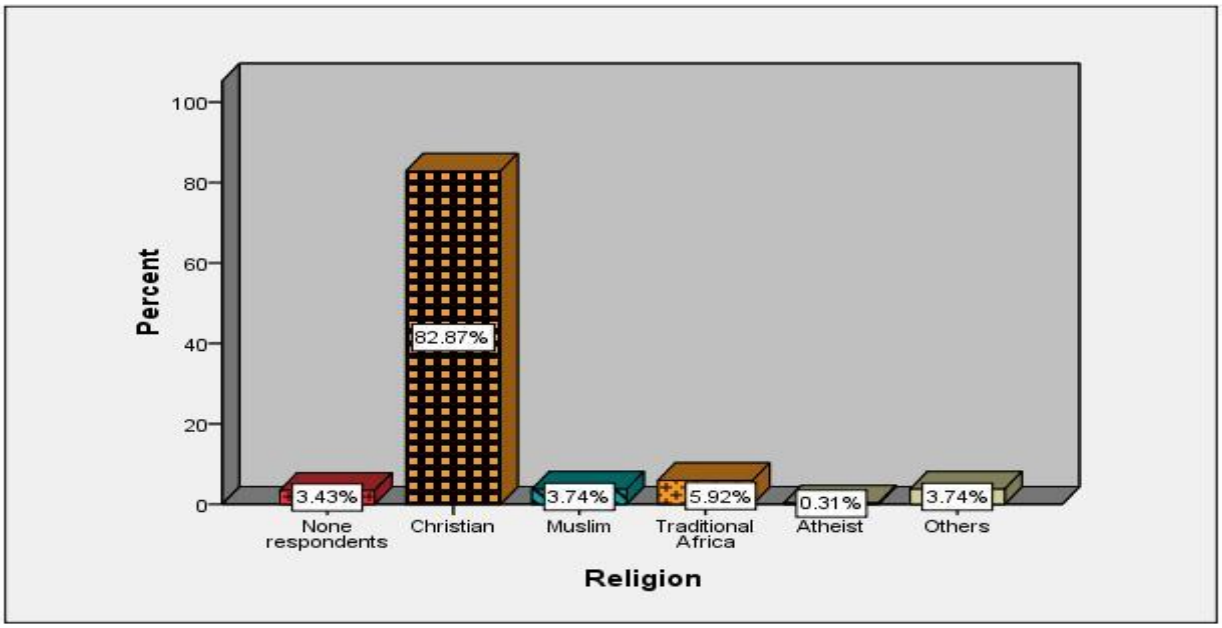

Figure 6: Religion distribution

The bar chart represents the type of religious practices of the participants. Christians made up a large proportion with 82.87%, African traditional religion followed with 5.92%, Muslims with 3.74% and lastly Atheist with 0.31%.

Section 2

Knowledge about HIV Voluntary Counseling and Testing (VCT)

Table 2: Can a person get AIDS by sharing bathroom and toilet with infected person

		Frequency	Percent
Valid	Non respondents	7	2.2
	Yes	27	8.4
	No	287	89.4
	Total	321	100.0

In table 2 above, 89.4% of the represents knew that a person can not get HIV/AIDS by sharing a bathroom and a toilet with an infected person while 8.4% responded that a person can contract HIV/AIDS by sharing a bathroom and a toilet with HIV infected person.

Table 3: Can washing after unprotected sexual intercourse prevent HIV infection?

	Frequency	Percent
Yes	20	6.2
No	291	90.7
Non respondents	10	3.1
Total	321	100.0

This result shows that majority of respondents (90.7%) knew that washing after having sex without condom can not prevent HIV infection while 6.2% think that it can prevent HIV infection

Table 4: Is AIDS caused by evil spirit or supernatural forces?

	Frequency	Percent
Non respondents	12	3.7
Yes	14	4.4
No	295	91.9
Total	321	100.0

In table-4 above a large number of respondents (91.1%) knew that AIDS is not caused by evil spirit or supernatural forces while only 4.4% believe otherwise.

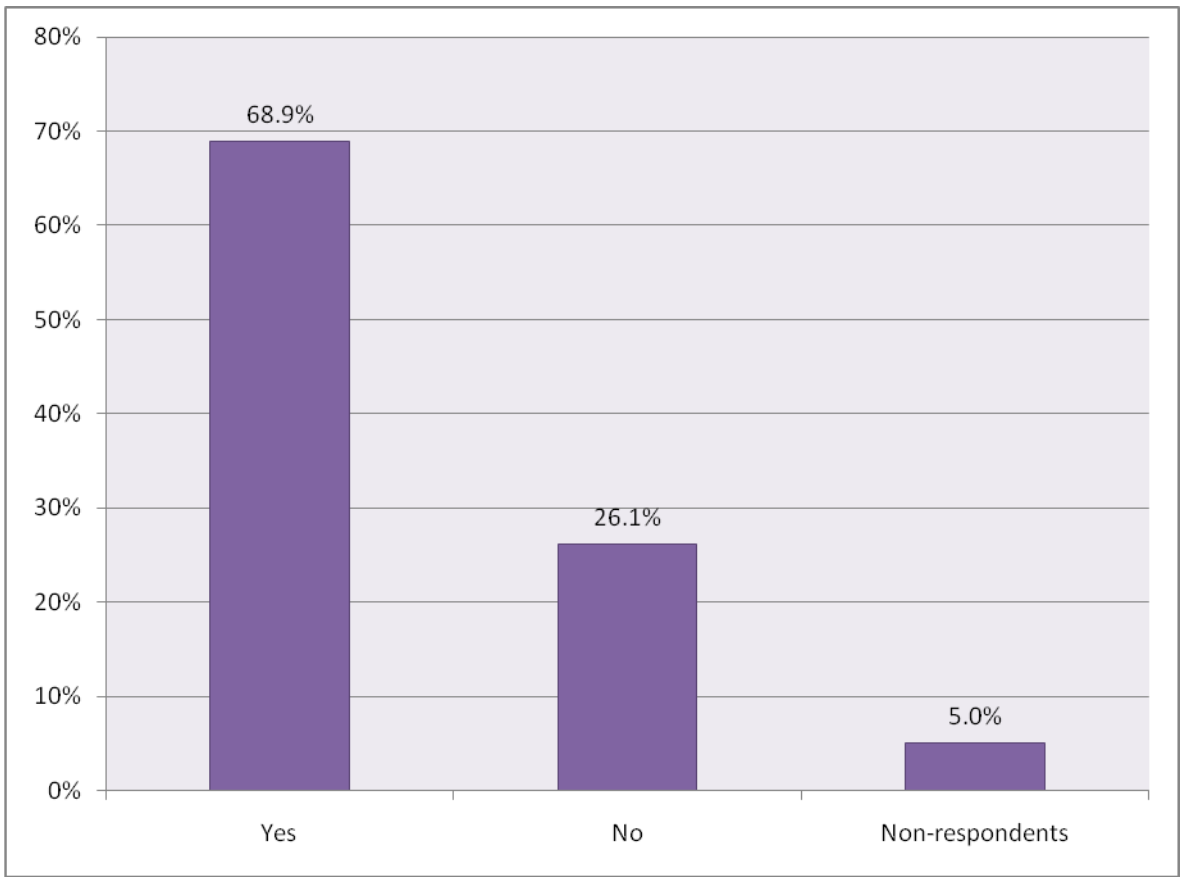

Figure 7 Can a pregnant woman give HIV to her unborn child?

The table above shows that a majority of the respondents (68.85%) knew that HIV infection can be transmitted by a pregnant woman to her unborn child while 26.17% did not know that it is possible to for an unborn child to contract the disease from infected mother.

Table 5: Can someone get rid of HIV infection by having sex with a woman who has not previously had any sexual exposure?

		Frequency	Percent
Valid	Non respondents	14	4.4
	Yes	81	25.2
	No	226	70.4
	Total	321	100.0

Table 5 shows that a large number of respondents (70.4%) knew that it is not possible to get rid of HIV infection by having sex with a woman who have had no previous sexual exposure while only 25.2% responded that it is possible to this question.

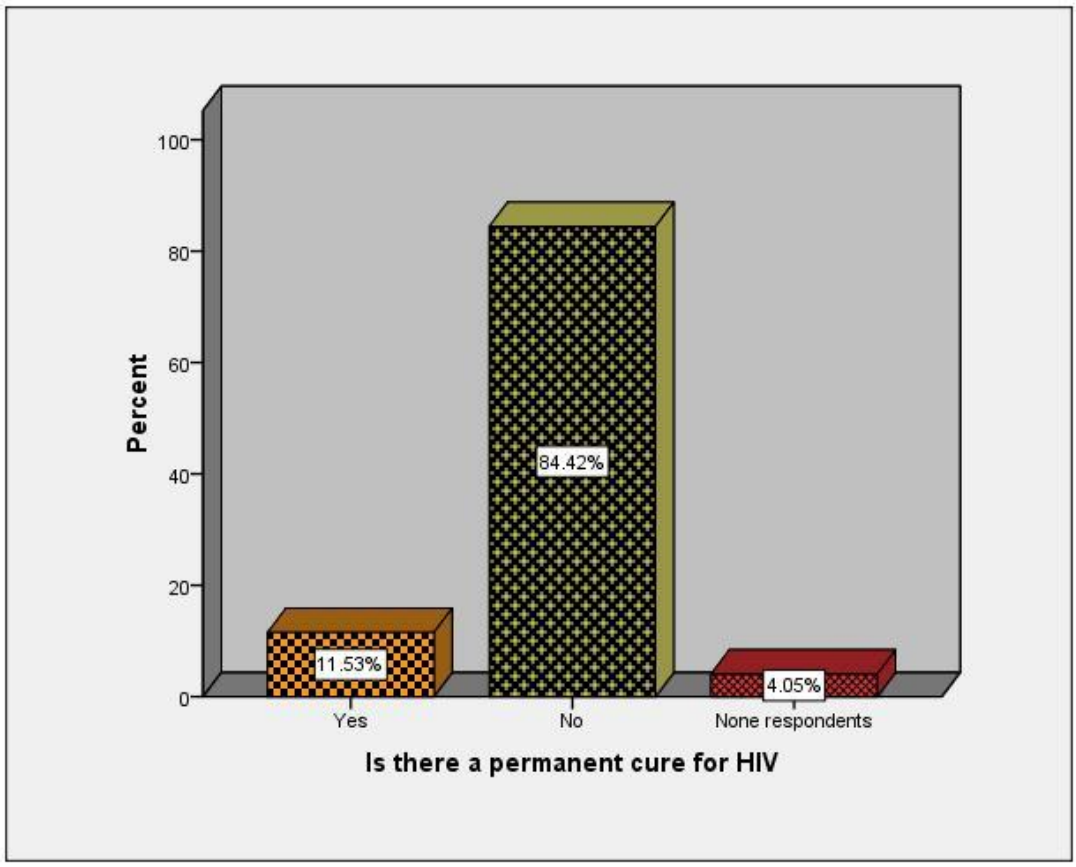

Figure 8: Is there a permanent cure for HIV?

The bar chart above shows that a large number of respondents (84.42%) knew that there is no permanent cure for HIV, while 11.53% did not know that there is no permanent cure .

Table 6: Can HIV infection be spread by kissing?

		Frequency	Percent
	Non respondents	5	1.6
	Yes	39	12.1
	No	277	86.3
	Total	321	100.0

Table-6 above shows that a large number of respondents (86.3%) knew that HIV can be spread by kissing while 12.1% did not know.

Table 7: Do you think that regular use of condoms help to prevent HIV infection?

		Frequency	Percent
Valid	Non- respondents	11	3.4
	Yes	248	77.3
	No	62	19.3
	Total	321	100.0

A large number of respondents (77.8%) as shown in table above knew that regular use of condoms help to prevent HIV infection while 19.3% do not agree that regular condom use is HIV preventive.

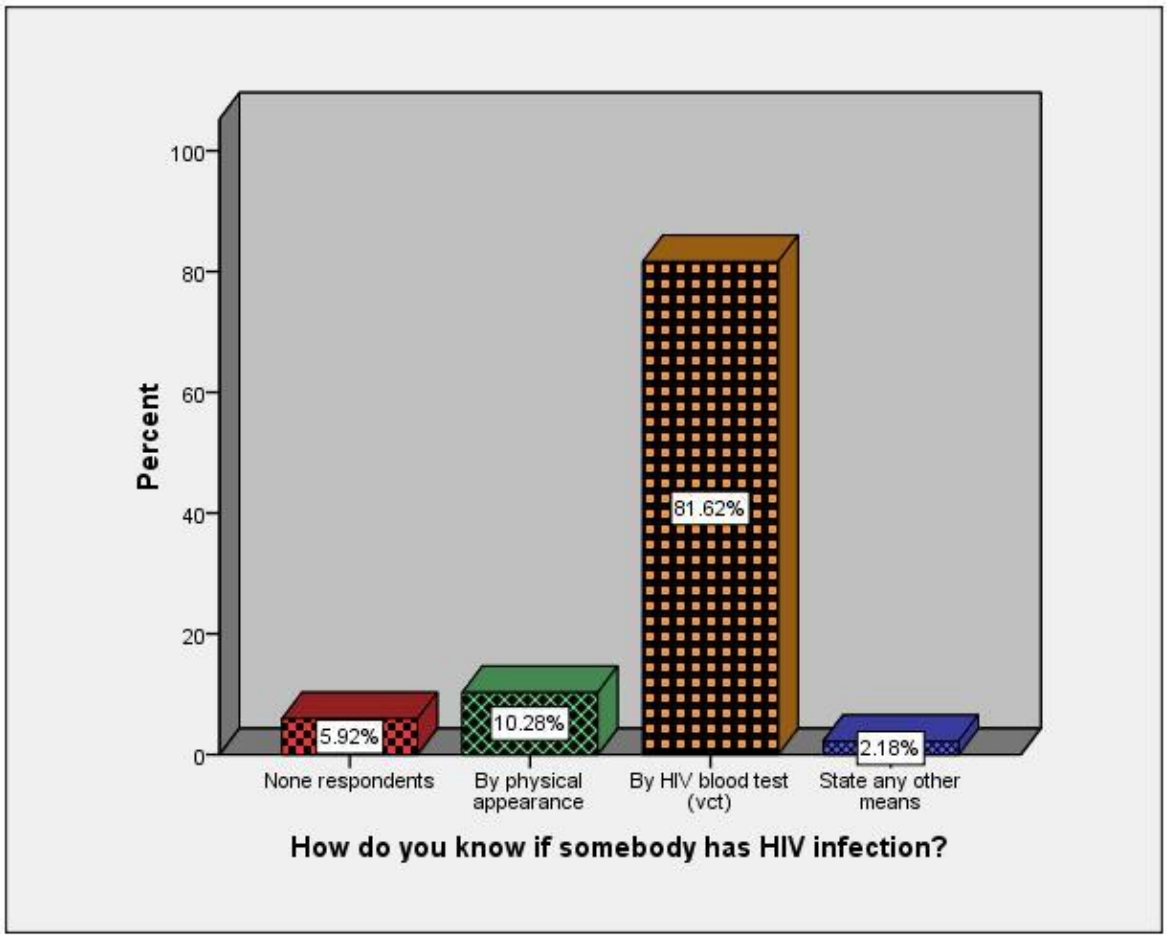

Figure 9: How do you know if somebody has HIV infection?

In the table above majority of the participants (81.62%) responded that they can know if

someone has HIV by taking a blood test (VCT), 10.28% responded by looking at the physical appearance of a person and 2.18% indicated other means of confirming someone's HIV status.

Section 3:

Assessment of HIV risk Behaviour

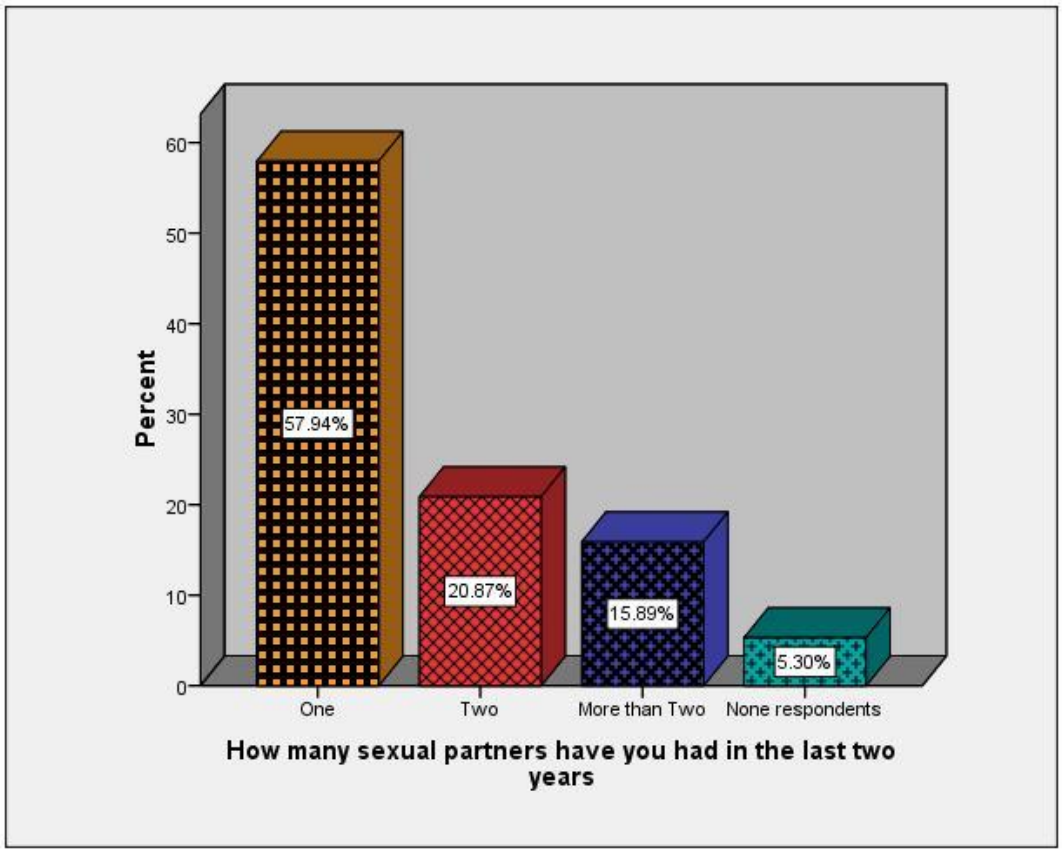

Figure 10: How many sexual partners have you had in the last two years?

It can be seen from this bar chart that most respondents (57.94%) reported that they have had

only one sexual partner in the last two years, 20.87% had two, 15.89% had more than two, and 5.30 did not respond to this question.

Table 8: How regularly do you use condoms?

		Frequency	Percentage
Valid	Every time	157	48.9
	Occasionally	102	31.8
	Never	46	14.3
	None respondents	16	5.0
	Total	321	100.0

The majority of respondents in table-8 (48.9%) reported that they use a condom every time they have sex, 31.8% reported that they use it occasionally and 14.3% have never used condom when having sexual intercourse.

Table 9: Have you ever been treated for Sexual Transmitted Infection?

		Frequency	Percentage (%)
Valid	Yes	113	35.2
	No	190	59.2
	Non- respondents	18	5.6
	Total	321	100.0

Table 9 shows that majority of respondents (59.2%) reported that they have never been treated for STIs while only 35.2% reported to have been treated for STIs.

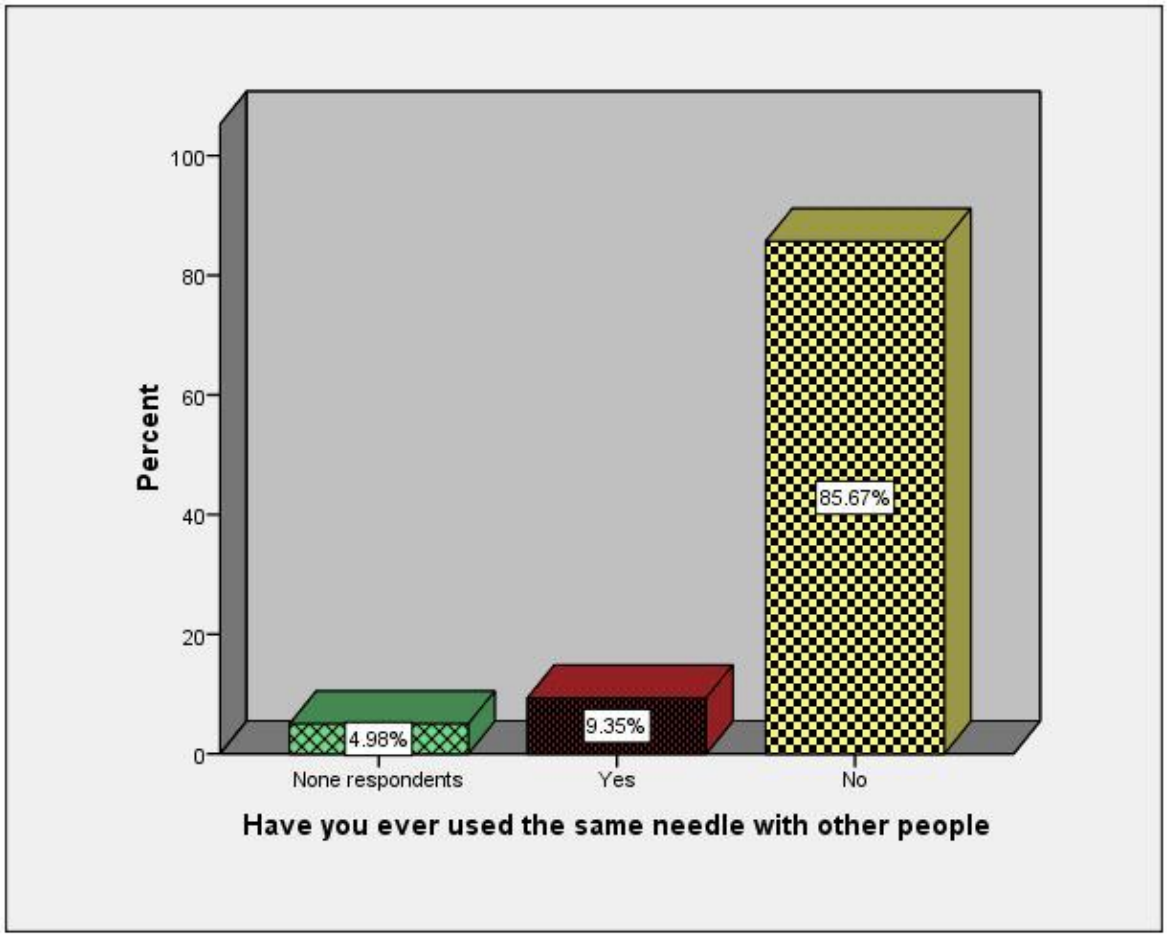

Figure 11: Have you ever used the same needle with other people?

The majority of respondents (85.67%) reported that they have never used the same needle with other person.

Section 4:

Attitude and Perception

Table 10: Have you ever had (taken) a HIV test (VCT)

	Frequency n = 321	Percent
Non - respondents	13	4.0
Yes	205	63.9
No	103	32.1
Total	321	100.0

Table 11: If yes was it in the last year?

	Frequency n = 205	Percent
Yes	150	73.2
No	45	22.8
Total	205	100.0

Table 10 - 11 shows that majority 205(63.9%) of the respondents have had a HIV test (VCT) while 103(32.1%) reported that they have never been tested for HIV. The majority (73.2%) of the respondents who had been tested said it was in the last year.

Table 12: ATTITUDE AND PERCEPTION

Variables	Number n = 205	%
Did you receive the results?		
Yes	187	91.2
No	18	8.78
What was the results of the test(Optional) n = 187		
No response	63	33.7
Positive	28	14.97
Negative	96	51.34
How many times have you been tested? n = 205		
No response	22	10.73
Once	48	23.4
More than twice	135	65.9

Why did you go for the test (VCT)? n =205		
Self referral	147	71.7
Doctor's referral	44	21
Other reasons	14	6.8
Would you want to take HIV test (VCT) again? n =205		
Yes	163	79.5
No	33	16.1
No response	9	4.4
Would you recommend HIV testing (VCT) to family and friends? (the responses was expected from the total sample size of 321 since not having previous HIV does not prevent someone from having a positive opinion about VCT or recommending it to loved ones)		
No response	37	11.5
Yes	233	72.6
No	51	15.9
If not tested what are the reason for not testing? n=103		
Never heard of HIV test	10	9.7
Do not want to know HIV status	69	66.99

Free HIV test not readily available	5	4.9
Other reason	19	18.45
Why do you think some people may not be interested in knowing their HIV status? n =321		
No response	106	33
Not availability of affordable medication to treat HIV	64	19.9
No privacy in HIV testing and result	80	24.9
No instant result	16	5.0
State other reasons	55	17.1
If tested positive to HIV would you want to know your results? n =321		
No respond	20	6.2
Yes	273	85.0
No	28	8.7
If tested positive to HIV would you disclose your status to any one? n=321		
No respond	19	5.9
Yes	196	61.1
No	106	33.0

To whom will you disclose your status if tested HIV positive? (responses was expected from the total sample size of 321 since not having previous test does not preclude an individual from having or stating his opinion)		
No response	32	10.0
Family	217	67.6
Friends	38	11.8
Mention any other person	34	10.6
Do you think family and friends will avoid you if you tested HIV positive? n=321		
No response	20	6.2
Yes	74	23.1
No	227	70.7
Do you think HIV testing (VCT) reduces the chances of getting HIV? n=321		
No response	30	9.3
Yes	156	48.6
No	135	42.1
If yes why do you think so n = 156		
No response	11	7.05
Avoiding risk behaviour	45	28.85
Live healthier lifestyle	67	42.95

Confident making future plan	12	7.67
Planning treatment if positive	18	11.54
Give other reasons	3	1.92

In table 12 it shows that out of 187(58.3%) who received their results 26(13.9%) reported that they were HIV positive while a majority 87(46.52%) were tested negative. The majority participants 189(58.9%) have been tested more than twice. Approximately 71.7% of the participants went for the test (VCT) on their own initiative, 172(83.9%) wanted to take HIV test (VCT) again and the majority 233(72.6%) of the participants recommended HIV testing (VCT) to family and friends.

Sixty nine (66.99%) participants did not want to be tested because they do not want to know their HIV status. When asked why some people were not interested in knowing their HIV status, the majority 106(33.0%) did not respond but 80(24.9%) of those who responded cited lack of privacy with HIV testing and result, 64 (19.9%) cited lack of affordable medication to treat HIV infection and 55(17.1%) gave other reasons such as fear of knowing their status. Approximately 85% of the participants would want to know their results if they ever tested positive.

If participants tested positive 196(61.1%) indicated that they would disclose their status to someone. The majority of participants- 217(67.6%) agreed that they would disclose their status to their family, this was followed by disclosure to friends (11.8%) and lastly others (10.6%) with partners specifically mentioned in this group. Although disclosure to partner was not a tested variable in this study (so the level of significance could not be ascertained) there were quite a few comments on willingness to disclose HIV status to partner. 227(70.7%) of the respondents indicated that family and friends will not avoid them if they tested positive to HIV. One hundred and fifty six (48.6%) respondents reported that HIV testing (VCT) reduces the chances of getting HIV out of which 67(42.95%) of these respondents reported that they will live healthier life style

while 45(28.85%) stated that it will curtail risk behaviour practices.

SECTION 5:

HIV Stigma

Table 13: HIV Stigma

Variables	Number (n = 321)	%
Do you think people with HIV are dirty? n = 321		
No respond	22	6.9
Yes	14	4.4
No	285	88.8
Do you think people with HIV are cursed?		
No respond	22	6.9
Yes	21	6.5

No	278	86.6
Do you think people with AIDS should be avoided?		
No respond	16	5.0
Yes	15	4.7
No	290	90.3
Do you think people with AIDS should be ashamed or guilty		
No respond	21	6.54
Yes	16	5.0
No	284	89.1
Do you think people with AIDS are weak?		
No respond	22	6.9
Yes	33	10.3
No	266	82.9
Do you think people with AIDS are foolish?		
No respond	16	5.0
Yes	16	5.0
No	289	90.0
Do you think it is safe for people with AIDS to work with children		
No respond	23	7.2

Yes	173	53.9
No	125	38.9
Would you eat food prepared by a person with AIDS		
No respond	23	7.2
Yes	249	77.6
No	49	15.3
Would you shake hands with person with AIDS?		
No respond	19	5.9
Yes	258	80.4
No	44	13.7
Do you think people with HIV should be branded?		
No respond	40	12.5
Yes	27	8.4
No	254	79.1
Do you think people with AIDS should be isolated?		
No respond	27	8.4
Yes	16	5.0
No	278	86.6
Do you think HIV infection is a form of punishment?		

No respond	20	6.2
Yes	42	13.1
No	259	80.7
Would you employ a person with HIV to work in your home		
No respond	23	7.2
Yes	239	74.5
No	59	18.4
Do you want to be friends with someone who is HIV positive/		
No respond	20	6.2
Yes	258	80.4
No	43	13.4

The result highlighted in table 13 shows that the majority 284(88.5%) of the participants as reported that being HIV positive does not mean you are dirty. Similarly 278(86.6%) participants reported that people with HIV were not cursed. Two hundred and and ninety (90.3%) of the respondents reported that people with AIDS should not be avoided and 286(89.1%) also did not agree that people with AIDS should be ashamed or feel guilty. Two hundred and sixty six (82.6%) of the respondents disagreed that people with AIDS are weak and that they are not foolish 289(90%).

One hundred and seventy three (53.9%) of the respondents reported that people with AIDS can work with children. The majority 249(77.6%) of the respondents indicated that they would eat

food prepared by a person with AIDS. The majority (78.5%) of the participants did not agree that people with HIV should be branded, and people with AIDS should not be isolated - 278(86.6). Two hundred and fifty eight (80.4%) of the participants reported that they do not think that HIV infection is a form of punishment. The majority (74.5%) of the participants agreed that they will employ people with HIV to work in their home and 258(80.4%) reported that they wanted to be friends with someone who is HIV positive.

Table 14: Distribution of risk behaviour by gender

		Gender				Chi-test	Crude	95%	P-value
		Male n = 98		Female n = 217			OR	CI	
		Number	%	Number	%	15.45			0.000
Number of sexual partner	1	44	44.8	142	65.4		1		
	>1	52	53	66	30.4		1.28	(1.23;2.95)	
	No response	6	1.9	7	2.2				
Condom use	Every time	54	55.1	103	47.5	10.678	3.14	(1.84;3.79)	0.01
	Occasionally	32	32.7	70	32.3		0.49	(1.40;2.33)	
	Never	11	11.2	35	16.1		0.53	(1.39;1.27)	

	No response	4	1.2	9	2.8				
Treated for STI	Yes	35	35.7	78	35.95	9.804	1		0.04
	No	63	64.3	131	60.4		0.33	(1.32;1.21)	
	No response	6	1.9	8	2.5				
Used same needle	Yes	6	6.1	24	11.0	7.541	1		0.05
	No	91	92.9	184	85.3		2.34	(1.75;1.27)	
	No response	7	2.2	8	2.5				

Table 14 above shows that females were less likely to have more than one sexual partner compared to males. This difference was statistically significant OR=1.28 (1.23; 2.95). There was no significant difference in gender with the use of condom as it was found to be significant in the people who have sexual intercourse with condom every time – OR 3.14 (1.84; 3.79), occasionally OR 0.49 (1.4;2.3) and never use it- OR 0.53 (1.39; 1.27

The was no statistical significance between the proportion of female 131 (60.4%) who have never had sexually transmitted infection compared to men (64.3%). In the same vein there was also no statistical significant association shown between women (92.9%) and men (85.3%) on sharing of needle with another person.

Comparisons of people who were tested with those who were not tested for VCT test HIV were conducted on demographic characteristics, knowledge, risk behaviour history, attitude and perception and HIV stigma. This gives some indication of the influence VCT on the knowledge, attitude and perception of HIV/AIDS and HIV Voluntary Counseling and Testing individuals in the community.

NOTE: *Certain variables do not add up 100% as only some sub-variables are shown eg the exclusion of non-response. In tables 14 to 19 many variable are found to be having missing data as participants could choose not to answer some of the survey questions or answer more than once per question.*

Section 6:

Assessment of the relationship between the socio-demographic profile and HIV testing history as well as the impact of previous VCT exposure on the knowledge, Attitude and Perception of HIV infection and subsequent HIV testing.

Table 15: Socio-demographic variables with HIV test (VCT)

		Have you ever had a HIV test(VCT)				Crude	95%	P-value
		Non-respondents	**Tested**	**Not tested**	Total	OR	CI	
Gender	Male	4 1.2%	56 17.4%	44 13.7%	104 32.4%	1		0.024
	Female	9 2.8%	149 46.4%	59 18.4%	217 67.6%	0.69	(0.52; 2.92)	2.92
Race	**Non-respondents**	1 .3%	3 .9%	4 1.2%	8 2.5%			0.027
	White	0 .0%	26 8.1%	5 1.6%	31 9.7%	1.49	(0.20; 1.33)	
	Black	12 3.7%	171 53.3%	86 26.8%	269 83.8%	2.21	(0.55; 3.82)	
	Colored	0 .0%	5 1.6%	8 2.5%	13 4.0%	0.49	(1.10; 1.33)	
Age	**Non-respondents**	2 .6%	3 .9%	3 .9%	8 2.5%			0.03

	18 - 21	0 .0%	19 5.9%	14 4.4%	33 10.3%	0.33	(1.39; 1.47)	
	22 - 32	4 1.2%	99 30.8%	42 13.1%	145 45.2%	1.21	(0.55; 2.82)	
	33 - 42	6 1.9%	68 21.2%	37 11.5%	111 34.6%	0.99	(1.10; 1.33)	
	43 - 53	1 .3%	16 5.0%	7 2.2%	24 7.5%	0.21	(0.11; 1.02	

		Have you ever had a HIV test(VCT)				Crude	95% CI		P-value
		Non-respondents	Tested	Not tested	Total	OR			
Marital status	Single	6 1.9%	119 37.1%	64 19.9%	189 58.9%	1			0.460
	Married	6 1.9%	69 21.5%	34 10.6%	109 34.0%	1.14	1.1	1.3	
	Divorced	0 .0%	9 2.8%	3 .9%	12 3.7%	0.53	0.5	1.9	
	Widowed	0	4	2	6				

		.0%	1.2%	.6%	1.6%				
Occupation	Employed	5 1.6%	122 38.0%	58 18.1%	185 57.6%	1			0.312
	Unemployed	6 1.9	80 24.9%	41 12.8%	127 39.6%	0.23	0.4	1.1	
Level of education	Post- matric	4 1.2%	73 22.7%	28 8.7%	105 32.7%	1			0.000
	Matric	3 .9%	97 30.2%	43 13.4%	143 44.5%	0.50	0.31	1.01	
	Grade 8	1 .3%	20 6.2%	25 7.8%	46 14.3%	0.94	0.58	1.67	
	Less than grade 8	2 .6%	7 2.2%	3 .9%	12 3.7%	2.59	0.27	3.00	
Religion	Christian	8 2.5%	175 54.5%	84 26.2%	267 83.2%	1			0.000
	Muslim	1 .3%	7 2.2%	4 1.2%	12 3.7%	0.57	0.35	0.79	
	Traditional Africa	0 .0%	11 3.4%	8 2.5%	19 5.9%	0.19	0.06	1.04	
	Atheist	0 .0%	0 .0%	1 .3%	1 .3%	0.85	0.38	1.89	
	Others	0	8	4	12				

	.0%	2.5%	1.2%	3.7%	0.49	0.12	1.90	

Fig 15 shows the socio demographic characteristics of the participants on their test – history. It shows that there were no significant association between all the demographic variables. Although the majority of the participants who have received VCT were of the female gender (46.4%) - OR 0.69 (0.52; 2.92), black race (53.3%) OR 2.21 (0.55; 3.82), age group 22 -33 (30.8%) 0R 1.22 (0.55; 1.33), but these were not statistically significant. The only exception with religion where the Muslim religion shows some level of significance with the p = 0 for HIV test.

Table 16: Knowledge of HIV and previous VCT exposure

		Have you ever had a HIV test(VCT)			Crude	95% CI		P=value
		Tested	Not tested	Total	OR			
Can a person get AIDS by sharing bathroom and toilet with infected person	Yes	16 5.0%	15 4.7%	27 8.40%	1			0.05
	No	189 58.9%	98 30.5%	287 89.4%	2.13	0.52	2.03	
Can washing after having sex without condom prevent HIV infection	Yes	12 3.7%	11 3,4%	20 6.20%	1			0.02
	No	193 60.1%	98 30.5%	291 91.3%	1.90	1.02	1.99	
Is AIDS caused by evil spirit or supernatural forces?	Yes	8 2.5%	6 1.9%	14 4.40%	1			0.004
	No	190 59.2%	95 29.6%	285 88.80%	2.45	0.99	2.14	0.011
Can pregnant women	Yes	149	71.9	221	1			

give HIV to her unborn child?		46.4%	22.4%	68.8				
	No	50.1 15.6%	34 10.6%	84 26.2%	0.89	1.54	2.00	0.001
Can someone get rid of HIV infection by having sex with woman who has not previously had any sexual exposure?	Yes	46 14.3%	35 10.9%	81 25.2%	1			
	No	155 48.3%	71 19.9%	226 70.4%	1.55	0.14	2.88	0.003
Is there a permanent cure for HIV	Yes	23 7.2%	13.8 4.3%	37 11.5%	1			
	No	179 55.8%	91 28.7%	271 84.4%	1.65	1.14	3.88	
Can HIV infection be spread by kissing?	Yes	19 5.9%	20 6.2%	39 12.1%	1			0.000
	No	185 57.6%	92 28.7%	277 86.3%	3.55	1.84	4.88	
Do you think regular use	Yes	175	73	248			.	

of condoms help prevent HIV infection?		54.5%	22.7 %	77.3%	1			0.0001
	No	30 9.3%	32 10.0%	64 10.0%	0.21 0.21	1.22 1.22	2.54 2.54	
How do you know if somebody has HIV infection?	By physical appearance	18 4.5%	22 6.9%	44 10.1%	1			0.005
	By HIV blood test(VCT)	183 57%	79 27.1%	270 84.1%	2.20	1.08	4.49	
	State any other means	3 0.9%	2 .6%	5 1.50%				

Table 16 shows further statistical analysis done to compare knowledge of respondents who were already tested to those who were not tested for HIV. A p-value of less than 0.05 shows a statistical significance. It was found that respondents who have had previous HIV VCT 189(58.9%) showed a statistical significant knowledge OR= 2.13 (0.52; 2.03) that it is not possible to contract HIV infection by sharing toilet and bathroom with infected person compared to respondents who have not received VCT. The majority 193(60.1%) who had taken VCT showed a statistical significant knowledge OR= 1.90 (1.02; 1.99) that washing after having sex without a condom does not prevent HIV infection. In the same light, there was a high level of good knowledge reported by the participants who were previously tested on the questions: can an HIV positive pregnant women can infect their unborn children with HIV infection? - OR= 0.89

(1.54; 2.00). The majority of the participants (54.5%) who have been previously tested knew that regular use of condoms helps to prevent HIV infection with OR=0.21 (1.22; 2.54). A similar trend was shown when previously tested respondents 183(57.0%) were found to be more likely to have a good knowledge that HIV blood testing was the only way to know if somebody had HIV infection OR = 2.20 (1.80; 4.49)

Table 17: Risk Behaviour against VCT exposure.

		Have you ever had a HIV test(VCT)			Crude	95% CI		P-value
		Tested	Not tested	Total	OR			
How many sexual partners have you had in the last two years	1	130 40.5%	52 18.1%	182 57.9%	1			0.000
	>1	68 21.2%	49 15.3%	117 36.50%	2.20	1.08	4.49	
How regularly do you	Every	111	46	157	1			0.000

use condoms?	time	34.6%	14.33%	48.9%				
	Occasionally	64 19.9%	38 11.8%	102 31.8%	0.10	1.04	1.49	
	Never	26 8.1%	20 6.2%	46 14.3%				
Have you ever been treated for Sexual Transmitted Infection?	Yes	89 27.7%	24 7.5%	113 35.2%	1			0.000
	No	114 35.5%	72 23.7%	190 59.2%				
Have you ever used the same needle with other people	Yes	17 5.3%	13 4%	30 9.3%	1			0.000
	No	184 57.3%	91 28.37%	275 85.67%	1.60	1.02	3.49	

The comparison of individuals who have had HIV test to those who have not been tested on risk behaviour history variables is shown in Table 17. Participants who have been tested were more

likely to give a good response than those who have not been tested. This was highly statistically significant with the $p<0.05$ for all the tested variables in the table.

Table 18: Attitude and perception with VCT exposure.

		Have you ever had a HIV test(VCT)			Crude	95% CI		P-value
		Tested	Not tested	Total	OR			
Would you recommend HIV testing (VCT) to family and friends?	Yes	179 55.8%	54 16.8%	233 72.6%	1			0.000
	No	17 5.3%	34 10.6%	51 15.9%	0.65	1.54	1.99	
If tested positive to HIV would you disclose your status to any one?	Yes	143 44.5%	55 16.5%	196 61.1%	1			0.000
	No	57 17.8%	48 14.95%	106 32.7%	1.32	0.61	2.41	
To whom will you disclose your status if tested HIV positive?	Family	155 48.3%	62 19.3%	217 67.6%	1			0.000
	Friends	21 5.9%	17 5.3%	38 11.8%	1.88	1.49	3.470.15	

	Menti on any other person	17 5.3%	17 5.3%	34 10.60 %	032	0.1.57 11		
Do you think family and friends will avoid you if you tested HIV positive?	Yes	36 11.2%	38 11.8%	74 23.1%	1			0.000
	No	163 50.8%	64 19.9%	227 70.7%	0.45	0.23	1.99	
Do you think HIV testing (VCT) reduces chances of getting *HIV?*	Yes	115 35.8%	41 12.8%	156 48.6%	1			0.000
	No	76 23.7%	53 16.5%	135 42.1%	1.02	1.44	2.97	
If yes why do you think so?	Avoiding risk behaviour	37 23.7%	8 5.1%	45 28.85 %	1			0.196
	Live healthier lifestyle	52 33.3%	15 9.6%	67 42.95 %	0.35	1.54	1.98	

	Confident making future plan	8 5.1%	4 2.56%	12 7.67%	1			

Table 18 above shows the influence of previous HIV testing on the attitude and the perception of HIV voluntary counselling and testing within the community. The majority of respondents previously tested were more likely to have a positive attitude and perception about HIV infection and VCT compared to respondents who have never received HIV voluntary counseling and testing. This was highly significant with p = 0.000 in all the tested variables in the table except with the question: "If yes why do you think so? "which is a follow up question to "do you think VCT reduces the chances of getting HIV infection?" (p value = 0196)

Table 19: HIV stigma and HIV test (VCT) exposure

		Have you ever had a HIV test(VCT)			Crude	95% CI		P-value
		Tested	Not tested	Total	OR			
Do you think people with HIV are dirty?	Yes	6 1.9%	8 2.5%	14 4.40%	1			0.000
	No	196 61.1%	89 27.7%	285 88.8%	3.22	1.11	3.48	

Do you think people with HIV are cursed?	Yes	10 3.1%	11 3.1%	21 6.5%	1			0.000
	No	187 58.9%	88 27.4%	278 86.6%	2.15	1.08	2.99	
Do you think people with AIDS should be avoided?	Yes	5 1.6%	10 3.1%	15 4.70%	1			0.000
	No	198 61.7%	91 28.4%	290 90.3%	1.59	0.55	2.22	
Do you think people with AIDS should be ashamed or guilty	Yes	5 1.6%	11 3.4%	16 5.00%	1			0.000
	No	198 60.4%	88 27.4%	284 88.4%	0.46	0.22	2.44	
Do you think people with AIDS are foolish?-	Yes	11 3.4%	5 1.6%	16 5.00%	1			0.000
	No	193 60.1%	96 29.9%	289 90.0%	0.71	0.33	1.98	

Do you think it is safe for people with AIDS to work with children?	Yes	126 39.3%	47 14.6	173 53.9%	1			0.000
	No	70 21.8%	55 17.1%	125 38.9%	2.01	0.55	4.66	
Do you think people with AIDS are weak?	Yes	16 5.0%	17 5.3%	33 10.30%	1			0.000
	No	185 57.6%	81 25.2%	266 82.9%	2.53	0.66	4.98	

A p- value of less than 0.05 shows a statistical significant. Results from table 19 above shows that participants who had been tested (taken VCT) for HIV have less AIDS related stigma and to have better perception of HIV infection/AIDS than participants who had not been tested. People who had been tested were less likely to think that people with AIDS are dirty, that they should feel ashamed, and should feel guilty with p = 0.000. Finally, participants who had been tested were significantly more likely than those who had not been tested to allow people with AIDS to work with children.

Chapter 5: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

DISCUSSION

Contrary to the earlier assumptions made from previous similar studies, the results of the present study show a significant number of respondents (63.9%) reporting to have previously been tested for HIV VCT compared to only 32.1% who had not yet taken VCT. The majority of the respondents who had VCT reported that it was taken in the previous year (46.7%) with a majority of these being self referred. The majority of participants also indicated desire to recommended VCT to loved ones, which indicate a high level acceptance (use) of VCT in this community. This trend may easily be traced to the improved level in the knowledge base of young adults in the community regarding HIV and VCT as shown in the results in section 2 data analysis (knowledge about HIV Voluntary Counseling and Testing) most probably because of the introduction of HIV education in the school curriculum and more recent aggressive mass-media campaigns on HIV awareness.

A sizeable proportion (66.7%) of the respondents who have not had HIV test reported that they preferred not to know their status. The main barriers cited for refusing to take the test include fear of breach of confidentiality because of lack of privacy in table 12 (24.9% of the respondents). Other barriers include lack of affordable ARV medication and low knowledge of VCT and other free HIV services readily accessible in the public health service and fear of knowing their status probably due to low self assessment resulting from previous exposure to risk behaviour. This suggests that Government and its affiliated organizations have not done enough to educate people on these free services in the public health facilities and how and where to access them.

The above findings is in keeping with the report by Worthington C and Myers T[24] in their 2003 study which examined the situational and social factors underlying anxiety associated with HIV testing. Their analysis revealed four themes: perceptions of risk and responsibility for health, stigma associated with HIV, the patient-provider power dynamic, and techniques used by test recipients to enhance control in their interactions with providers.

This study did not reveal any particular difference in the socio-demographic characteristics between the participants who have had previous HIV VCT and does who have not been tested. This was shown in the cross tabulation result in table 15 were it was found that all the socio-demographic variables did not show any significant association with the test - history of participants. This was contrary to the findings by Kalichman SC et a who reported that individuals who had been tested had significantly more years of education than people not tested, although the difference between means was less than one year of education[7].

Although a high proportion of respondents (61.1%) reported that they will disclose their status if tested positive to HIV but there is still some level of secrecy surrounding HIV status as shown with 32.7% of respondents refusing to disclose their status if tested positive. This is largely as a result of fear of rejection and attendant social-stigma which is still associated with the disease. Remarkably, most of those who agreed to disclose their status indicated they will prefer to disclose to family and friends presumably due to the belief that family and friends will accept their status. This finding is consistent with result from similar study conducted by MacPhail C.L et al[11] in 2006. There was also overwhelming comments in favour of disclosure to partner. This finding is very significant not only in addressing certain ethical dilemma encountered by most Physicians during their day to day clinical practice regarding disclosure of a patient's HIV status to family and loved ones especially partners who may be potentially at risk. This conflicting with

the ethical requirement to maintain confidentiality of the patient's result. It also ensures that HIV positive patients seek and obtain good social support from family and friends which is essential in ensuring good adherence once treatment is commenced. Therefore, VCT can be regarded as a viable tool to ensuring easier referral to care and support services[3] .

There is an overall good attitude as well as a general good perception of or towards individuals infected with HIV in the community and this was found to have a direct relationship with previous exposure to HIV VCT (table 18). They were less likely to display or have HIV/AIDS associated stigma (table 19). The pre-and post-test counseling sections in this regard may serves as an easy platform for the educational orientation of participants taking the test. It was also reported by the majority of respondents that VCT encourages risk behaviour change and a healthier life style. This is consistent with the assertion made by Duijn MNF[3] that counseling appears to be a strategy which might lead to the adoption of behaviour that promotes safer sexual practices.

The study result on the whole shows that the risk of transmitting or contracting HIV infection is higher with the male gender (shown in table 14). The female gender was found to have fewer sexual partners and less likely to have had sexual transmitted infections (STIs) than the males population thus reducing the chances of contracting HIV infection. This is quite reassuring as previous similar studies gave a contrasting result[9]. The possible reason for this may be that most pregnant women during their Ante natal classes are given health education on HIV/AIDS and they are offered VCT as well.

There is an obvious decrease in risk behaviour with those respondents who had VCT previously compared to those who had not taken the test. This also consistent with Duijn[3] research findings. Respondents not tested were more likely to have multiple sexual partners and less likely to

practice safe sex. The exceptions to this trend were responses to the questions asking them if they had been previously treated for STIs and if they had been sharing used needles where there were no significant difference between the two groups. The reason attributed to the former may be because the duration was not stipulated from the time when they last took VCT to when they were infected with STI. Hence, this makes it difficult to ascertain any influence HIV VCT might have had on risk behaviour change. The reason for the latter may be due to the low knowledge and prevalence of intravenous drug use as means of transmission in this community.

There were certain areas of limitations in this study. Notable among them was the fact that the community is dynamic as most inhabitants have only migrated there because of employment purposes. Most of them work on contract basis and will have to return to their respective homelands in other provinces at the end of their contracts. Hence, the result from the study may not be regarded as a true reflection of the views of the geopolitical region. Another area of concern was that most of the respondents were literate above Grade 8. Therefore since it was a self administered questionnaire less educated members of the community were not willing to participate in the study. Similarly, the level of the comprehension of the questions in the questionnaire may doubtful and could be related to the level of education. Hence, the views from this study may be more a representation of only those respondents who could read and write.

A few of the questionnaires were returned, partially completed with some of the questions not answered. These were represented as "Non-respondent" in the frequency tables and charts and posed some difficulties during data analysis. This is a problem common with self administered questionnaire as data collecting tool as the respondents and responses are anonymous.

CONCLUSION AND RECOMMENDATIONS

The study showed a fairly significant level of acceptance of HIV voluntary testing and counseling in Kempton Park community. This is shown by the high number of respondents who reported having received previous HIV test and their overwhelming willingness to retake the test and recommend it to loved ones. This is a remarkable improvement from a previous study done in 2003 in a black township in Cape Town by S.C. Kalichman et al[4] and some other similar studies .There is still however a lot more work to be done to further improve on this present study figures in the bid to attain the South African National Government goal or target of having 15 million of South Africans tested and 50 % reduction in transmission rate by the year 2011 via the recently launched HCT mass programme.[5]

Although the study showed that there is a significant level of acceptance of HIV status especially with family and friends in the community, there was still an overall high level of HIV/AIDS related social stigma recorded. This has created a major barrier to HIV testing hence the citing of privacy concerns as a major reason for respondents not testing. MacPhail CT et al[18] and Bwambale FM et al[10] reported similar findings in their 2006 and 2008 studies respectively. In view of this, provision of HIV services in the public health facilities should be tailored with the aim of ensuring adequate level of confidentiality. This should also include proper patients' record keeping to ensure that a third party does not get access to them.

In view of the above research findings it can be inferred that a reduction in the level of social stigma associated with HIV infection should be the focus of subsequent HIV infection control interventions. This will ensure high societal acceptance of an individual's HIV status which in

the long run will increase the number of people volunteering for testing. The larger the number that takes HIV VCT, the higher will be the level of knowledge, attitude and perception of HIV infection and VCT and vice visa. This hypothetical cycle can be likened to a win-win situation for all the parties involved.

Possible intervention to decrease HIV/AIDS stigma and thus increase the use of HIV VCT services will include increasing media education and information campaigns, especially the ones targeting the susceptible population, young adults. Community and youth leaders' assistance should also be solicited in order to pass across the right information especially to individuals with low educational statuses. The recent public HIV testing taken by President Zuma and the commitment by his cabinet to take HIV test publicly is a major step in the right direction to attaining this end.

Testing is vital to reducing the incidence of HIV/AIDS in South Africa because those who know their status can seek the support they need to feel empowered to make more informed decisions concerning their livelihoods, sexuality and family planning[5]. Changing societal perceptions of HIV infection and discriminative attitudes towards people who are infected with HIV will be a major step in the right direction to improve the uptake of HIV Voluntary Counselling and Testing among all South Africans and the world generally.

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